

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.umpto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|------------------------------------|---------------|----------------------|-------------------------|------------------|--|
| 10/039,984 | 10/29/2001 | Olga G. Petrovskaia | 1651A1 | 8551 | |
| 75 | 90 04/09/2003 | | | | |
| Frank P. Mallak, PA | | | EXAMINER | | |
| PPG Industries, Inc. One PPG Place | | | TUCKER, PHILIP C | | |
| Pittsburgh, PA | 15272 | | ART UNIT | PAPER NUMBER | |
| | | | 1712 | 5 | |
| | | | DATE MAILED: 04/09/2003 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|--|---|--|-------------|
| | Application No. | Applicant(s) | |
| Office Action Summary | 10/039984 Examiner | PETROVSKAIA Group Art Unit | |
| | P. Tucke | | |
| -The MAILING DATE of this communication ap | pears on the cover sheet | beneath the correspondence add | iress |
| Period for Reply | _ | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SE OF THIS COMMUNICATION. | ET TO EXPIRE3_ | MONTH(S) FROM THE MAILI | NG DATE |
| Extensions of time may be available under the provisions of 37 C from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days If NO period for reply is specified above, such period shall, by de Failure to reply within the set or extended period for reply will, by | , a reply within the statutory mini fault, expire SIX (6) MONTHS fro | mum of thirty (30) days will be considered | timely. |
| Status | | | |
| ☐ Responsive to communication(s) filed on | | | |
| ☐ This action is FINAL . | | | |
| Since this application is in condition for allowance exaccordance with the practice under Ex parte Quayle, | | | ed in |
| Disposition of Claims | | | |
| Claim(s) | | is/are pending in the applic | ation. |
| Of the above claim(s) | | is/are withdrawn from cons | sideration. |
| | | | |
| Claim(s) | | is/are allowed. | |
| ∇ Claim(s) $1-3$, $5-21$ | | is/are allowed. is/are rejected. | |
| Claim(s) $\frac{1}{1}$ $\frac{3}{5}$ $\frac{5}{2}$ | | is/are rejected. | |
| \times Claim(s) $1-3$, $5-2$ | | is/are rejected. is/are objected to. are subject to restriction or | · election |
| \bigcirc Claim(s) $1-3$, $5-21$ | | is/are rejected. | election |
| Claim(s) $1-3$, $5-21$ Claim(s) 1 | | is/are rejected. is/are objected to. are subject to restriction or | election |
| Claim(s) 1 - 3, 5 - 21 Claim(s) — — — — — — — — — — — — — — — — — — — | awing Review, PTO-948. is □ approved | is/are rejected. is/are objected to. are subject to restriction or requirement. | election |
| Claim(s) | awing Review, PTO-948. is □ approved | is/are rejected. is/are objected to. are subject to restriction or requirement. | · election |
| Claim(s) | awing Review, PTO-948. is □ approved bjected to by the Examiner. | is/are rejected. is/are objected to. are subject to restriction or requirement. | election |
| Claim(s) | awing Review, PTO-948. is □ approved bjected to by the Examiner. | is/are rejected. is/are objected to. are subject to restriction or requirement. | election |
| Claim(s) | awing Review, PTO-948 is | is/are rejected. is/are objected to. are subject to restriction or requirement. disapproved. | election |
| Claim(s) | awing Review, PTO-948 is approved bjected to by the Examiner. er. ty under 35 U.S.C. § 11 9(a) s of the priority documents h | is/are rejected. is/are objected to. are subject to restriction or requirement. disapproved. | election |
| Claim(s) | awing Review, PTO-948 is approved bjected to by the Examiner. er. ty under 35 U.S.C. § 11 9(a) s of the priority documents to | is/are rejected. is/are objected to. are subject to restriction or requirement. disapproved. | · election |
| Claim(s) | awing Review, PTO-948 is approved bjected to by the Examiner. er. ty under 35 U.S.C. § 11 9(a) s of the priority documents by amber) b International Bureau (PCT | is/are rejected. is/are objected to. are subject to restriction or requirement. disapproved. disapproved. 7-(d). have been | election |
| Claim(s) | awing Review, PTO-948 is approved bjected to by the Examiner. er. ty under 35 U.S.C. § 11 9(a) s of the priority documents by amber) b International Bureau (PCT | is/are rejected. is/are objected to. are subject to restriction or requirement. disapproved. disapproved. 7-(d). have been | election |
| Claim(s) | awing Review, PTO-948 is approved bjected to by the Examiner. er. ty under 35 U.S.C. § 11 9(a) s of the priority documents the priority documents to the priority | is/are rejected. is/are objected to. are subject to restriction or requirement. disapproved. disapproved. 7-(d). have been | election |
| Claim(s) | awing Review, PTO-948 is approved bjected to by the Examiner. er. ty under 35 U.S.C. § 11 9(a) s of the priority documents to the priori | is/are rejected. is/are objected to. are subject to restriction or requirement. disapproved. c)-(d). have been Rule 1 7.2(a)). | |

U. S. Patent and Trademark Office PTO-326 (Rev. 9-97) Application/Control Number: 10/039984 Page 2

Art Unit: 1712

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-3 and 5-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, part (b) in the definition of R3 (page 45, lines 11-12), there is no antecedent basis for "said first R3 ring" or "said second R3 ring". In claim 2, part (b) in the definition of R3 (page 49, line 7), there is no antecedent basis for "said R3 ring". Dependent claims fall herewith.

Claim 2 ends with a semicolon, it is thus not clear if the claim is complete.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

Application/Control Number: 10/039984 Page 3

Art Unit: 1712

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purpos es of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).
- 4. Claims 1-3 and 5-15 are rejected under 35 U.S.C. 102(e) as being anticipated by JP 2000-327675.

JP '675 teaches a photochromic composition which comprises spiro and oxo naphthopyran compounds of the present invention, which are used in similar polymer compositions (see whole document).

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1, 3 and 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000-327675 in view of Van Gemert (5645767).

Application/Control Number: 10/039984

Art Unit: 1712

JP '675 teaches a photochromic composition which comprises spiro and oxo

naphthopyran compounds of the present invention, which are used in similar polymer

compositions (see whole document). JP '675 differs from the present invention in that the use of

a second photochromic compound having an absorption maxima between 400 and 700 nm is not

disclosed. Van Gemert teaches naphthopyran compounds which are isomers of the present

compounds, and teaches the use of such compound in combination with other photochromic

compounds to achieve an appropriate hue (column 12, lines 33-44). It would be obvious to one

of ordinary skill in the art to combine the compounds of JP '675, with a photochromic compound

having an absorption maxima between 400 and 700 nm, given the teaching of Van Gemert that

the combination of similar naphthopyrans and photochromic compounds, may be made to

achieve an appropriate hue.

7. Claim 4 is allowable over the art of record.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Tucker whose telephone number is (703) 308-0529. The examiner's normal working hours are 7:30am-4:00pm, Monday-Friday. If necessary SPE Robert Dawson

may be contacted at 703-308-2340. For inquiries of a general nature call the receptionist

at 703-308-0651. The group FAX no. is 703-872-9310. The after final fax no. Is 703-872-9311.

PCT-2773 April 3, 2003

PHILIP C. TUCKER ART UNIT 1712

Page 4